

Changing corporate tax policy impacts on the risk level of Viet Nam electric power firms

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Abstract

This study analyzes the impacts of tax policy on market risk for the listed firms in the electric power industry during and after the period 2007-2009 as the local economy has been affected by the financial crisis.

First, by using quantitative and analytical methods to estimate asset and equity beta of total 20 listed companies in Viet Nam electric power industry with a proper traditional model, we found out that the beta values, in general, for many companies are acceptable.

Second, under 3 different scenarios of changing tax rates (20%, 25% and 28%), we recognized that there is not large disperse in equity beta values, estimated at 0,446, 0,449 and 0,451. These values are much lower than those of the listed VN construction firms. Third, by changing tax rates in 3 scenarios (25%, 20% and 28%), we recognized both equity and asset beta mean values have positive relationship with the increasing levels of tax rate.

Finally, this paper provides some outcomes that could provide companies and government more evidence in establishing their policies in governance.

Keywords: Equity beta, financial structure, financial crisis, risk, tax rate, electric power industry.

Introduction

Together with the development of real estate and banking industry, during many recent years, Viet Nam electric power industry is considered as one of active economic sectors, which has certain positive effect for the country GDP.

This paper is organized as follow. The research issues and literature review will be covered in next sessions 2 and 3, for a short summary. Then, methodology and conceptual theories are introduced in session 4 and 5. Session 6 describes the data in empirical analysis. Session 7 presents empirical results and findings. Next, session 8 covers the analytical results. Then, session 9 presents analysis of risk. Lastly, session 10 will conclude with some policy suggestions. This paper also supports readers with references, exhibits and relevant web sources.

Research Issues

We mention some issues on the estimating of impacts of tax rates on beta for listed electric power companies in Viet Nam stock exchange as following:

Issue 1: Whether the risk level of electric power firms under the different changing scenarios of tax rates increase or decrease so much.

Issue 2: Whether the disperse distribution of beta values become large in the different changing scenarios of tax rates estimated in the electric power industry.

Literature review

Smith (2004) mentions in Chicago, properties located in a designated TIF (tax increment financing) district will exhibit higher rates of appreciation after the area is designated a qualifying TIF district when compared to those properties selling outside TIF districts, and when compared to properties that sell within TIF district boundaries prior to designation.

Robert *et al.* (2011) recognized a significant positive relation between changes in intercorporate investment and changes in

corporate marginal tax rates on ordinary income. Duanjie and Jack (2011) found out the US effective corporate tax rate on new investment was the highest rate in the OECD.

Next, Ruud *et al.* (2013) said that greater tax bias is associated with significantly higher aggregate bank leverage, and this in turn is associated with a significantly greater chance of crisis. Steven (2013) indicated that international tax reform is a major part of Business Tax Reform of the US President. And Both OECD and Europe Commission have recently released projects designed to address corporate tax evasion and profits shifting. Omri (2013) suggested the US should adopt a two-pronged corporate tax –residence test: the place where the corporation's securities are listed for public trading, or the place of the corporation's central management and control.

Beside, Terry *et al.* (2013) stated corporate tax avoidance increases after-tax cash flows available to service the debt by lowering cash taxes thus reducing the risk of default, whereas it can induce tax risk by increasing the uncertainty about the magnitude and volatility of the firms' future profits and cash flows.

Then, Sung, Mark and Laura (2013) also indicated that business property values are more responsive to changes in tax rates as compared to residential property.

Finally, tax rate can be considered as one among many factors that affect business risk of real estate firms.

Conceptual theories

The impact of fiscal policy on the economy

Tax policy is one among major fiscal policies. Corporate taxation might affect the output, income or compensation, as well as the revenue-raising capacity of both the tax system and the company. Therefore, in different countries, the tax system could have different effectiveness.

In a specific industry such as wholesale and retail industry, on the one hand, using tax policy with a decrease or increase in tax

rate could affect tax revenues, profit after tax and financial results and compensation and jobs of the industry. On the other hand, using tax policies could increase the financial results of this industry and therefore, affect the tax revenues, compensation and jobs.

During and after financial crises such as the 2007-2009 crisis, there raises concerns about fiscal policies or public policies of many countries, in both developed and developing markets.

Methodology

The impacts from the financial crisis happened during the period 2007-2011; therefore, in this study, we use the live data from the stock exchange market in Viet Nam (HOSE and HNX) during the four or five years period to estimate systemic risk results and tax impacts.

In this study, analytical research method is used and specially, tax rate scenario analysis method is used. Analytical data is from the situation of listed wholesale and retail firms in VN stock exchange and current tax rate is 25%.

Finally, we use the results to suggest policy for both these enterprises, relevant organizations and government.

General Data Analysis

The research sample has total 20 listed firms in the electric power market with the live data from the stock exchange.

Firstly, we estimate equity beta values of these firms and use financial leverage to estimate asset beta values of them. Secondly, we change the tax rate from 25% to 28% and 20% to see the sensitivity of beta values. In 3 cases (rate = 20%, 25%, and 28%), asset beta mean is estimated at 0,255, 0,256 and 0,257. Also in 3 scenarios, we find out var of asset beta estimated at 0,042 (almost the same, with a little decrease if tax rate increases to 28%) which shows small risk dispersion. Tax rate changes almost has no effect on asset beta var under financial leverage.

Empirical Research Findings and Discussion

In the below section, data used are from total 20 listed electric power companies on VN stock exchange (HOSE and HNX mainly). In the scenario 1, current tax rate is 25% which is used to calculate market risk (beta). Then, two (2) tax rate scenarios are changed up to 28% and down to 20%, compared to the current corporate tax rate.

Market risk (beta) under the impact of tax rate, includes: 1) equity beta; and 2) asset beta.

7.1 Scenario 1: current tax rate is 25%

In the case of tax rate of 25%, all beta values of 20 listed firms on VN electric power market as following:

Table 1: Market risk of listed companies on VN electric power market (t = 25%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	BTP	0,840	0,357
2	CHP	0,407	0,168
3	DNC	-0,865	-0,270
4	DRL	0,473	0,388
5	DTV	0,527	0,499
6	GHC	0,359	0,117
7	HJS	0,699	0,200
8	KHP	0,615	0,308
9	NBP	0,914	0,604

10	ND2	0,180	0,043
11	NLC	0,550	0,510
12	NT2	0,639	0,137
13	PPC	0,811	0,232
14	RHC	0,361	0,200
15	SBA	0,177	0,062
16	SEB	0,427	0,194
17	SHP	0,485	0,245
18	SJD	0,420	0,221
19	TBC	0,612	0,568
20	TIC	0,351	0,343

7.2. Scenario 2: tax rate increases up to 28%

If corporate tax rates increases up to 28%, all beta values of total 20 listed firms on VN electric power market as below:

Table 2: Market risks of listed electric power firms (t = 28%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	BTP	0,840	0,357
2	CHP	0,415	0,172
3	DNC	-0,865	-0,270
4	DRL	0,475	0,390
5	DTV	0,528	0,500
6	GHC	0,368	0,120
7	HJS	0,699	0,200
8	KHP	0,615	0,308
9	NBP	0,914	0,604
10	ND2	0,185	0,044
11	NLC	0,550	0,510
12	NT2	0,639	0,137
13	PPC	0,811	0,232
14	RHC	0,361	0,200
15	SBA	0,181	0,064
16	SEB	0,427	0,194
17	SHP	0,493	0,249
18	SJD	0,420	0,221
19	TBC	0,612	0,568
20	TIC	0,351	0,343

7.3. Scenario 3: tax rate decreases down to 20%

If corporate tax rate decreases down to 20%, all beta values of total 20 listed firms on the electric power market in VN as following:

Table 3: Market risk of listed electric power firms (t = 20%)

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)
1	BTP	0,840	0,357
2	CHP	0,393	0,163
3	DNC	-0,865	-0,270
4	DRL	0,468	0,384
5	DTV	0,526	0,498
6	GHC	0,345	0,113
7	HJS	0,699	0,200
8	KHP	0,615	0,308
9	NBP	0,914	0,604
10	ND2	0,172	0,041
11	NLC	0,550	0,510
12	NT2	0,639	0,137
13	PPC	0,811	0,232
14	RHC	0,361	0,200
15	SBA	0,170	0,060
16	SEB	0,427	0,194
17	SHP	0,471	0,238
18	SJD	0,420	0,221
19	TBC	0,612	0,568
20	TIC	0,351	0,343

All three above tables and data show that values of equity and asset beta in the case of increasing tax rate up to 28% or decreasing rate down to 20% have small fluctuation.

Comparing statistical results in 3 scenarios of changing tax rate:

a. tax rate = 25%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	0,914	0,604	0,3094
MIN	-0,865	-0,270	-0,5946
MEAN	0,446	0,255	0,1909
VAR	0,1359	0,0419	0,0940

Note: Sample size : 20

b. tax rate = 28%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	0,914	0,604	0,3094
MIN	-0,865	-0,270	-0,5946
MEAN	0,451	0,257	0,1938
VAR	0,1350	0,0417	0,0934

Note: Sample size : 20

c. tax rate = 20%

Statistic results	Equity beta	Asset beta (assume debt beta = 0)	Difference
MAX	0,914	0,604	0,3094
MIN	-0,865	-0,270	-0,5946
MEAN	0,446	0,255	0,1909
VAR	0,1359	0,0419	0,0940

Note: Sample size : 20

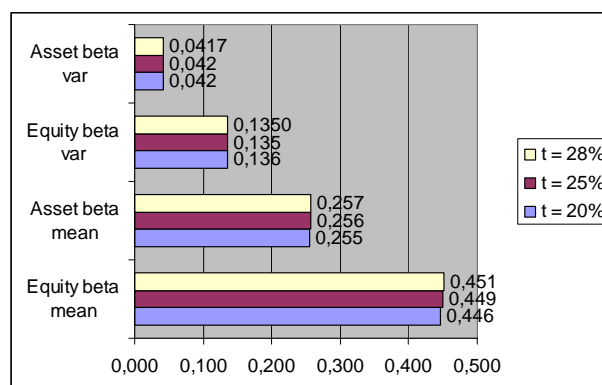
Based on above results, we find out:

Equity beta mean values in all 3 scenarios are quite low (< 0, 5) and asset beta mean values are quite small (< 0, 3). In the case of current tax rate of 25%, equity beta value fluctuates in a wide range from -0,865 (min) up to 0,914 (max) and asset beta fluctuates from -0,270 (min) up to 0,604 (max). We note there is a big decrease in max asset beta value here. If corporate tax rate increases to 28%, equity beta moves from -0,865 (min) up to 0,914 (max) and asset beta moves from -0,270 (min) up to 0,604 (max). Hence, we note that there is no change in asset /equity beta range if corporate tax increases. When tax rate decreases down to 20%, equity beta value changes from -0,865 (min) up to 0,914 (max) and asset beta changes from -0,270 (min) up to 0,604 (max). So, there is no increase or decrease in equity/asset beta value range when tax decreases in scenario 3. Beside, Exhibit 7 informs us that in the case 28% tax rate, average equity beta value of 20 listed firms increases up to 0,002 while average asset beta value of these 20 firms increase slightly up to 0,001. Then, when tax rate reduces to 20%, average equity beta value of 20 listed firms reduce to 0,003 and average asset beta value down to 0,001.

The below chart 1 shows us : when tax rate decreases down to 20%, average equity and asset beta values decrease slightly (0,446 and 0,255) compared to those at the initial rate of 25% (0,449 and 0,256). At the same time, when tax rate increases up to 28%, average equity and beta increases slightly (to 0,451 and 0,257). However, the fluctuation of equity and asset beta values

(0,136 and 0,042) in the case of 20% tax rate is higher than or equal to (>=) the results in the rest 2 tax rate cases.

Chart 1: Comparing statistical results of three (3) scenarios of changing tax rate



Risk analysis

In the case of decreasing tax rate, (20%), the market and companies can receive more benefits such as generating more jobs and compensation and have more cash flow available, but the government budget can have deficit and the government has to cut expenses. Changes in tax rates can have both positive and negative impacts on the local market.

In the case of increasing tax rate (28%), the government will have budget to finance public expenditures but the tax could reduce both demand and supply. Moreover, both the company and the firm owner will have to pay taxes. And the implementation of this tax policy will have more difficulties.

Conclusion and Policy suggestion

In summary, the government continues to increase the effectiveness of building the legal system and regulation and macro policies supporting the plan of developing both the construction together with the real estate market. The Ministry of Finance Continue to increase the effectiveness of fiscal policies and tax policies which are needed to combine with other macro policies at the same time, although we could note that in this study when tax rate is going to increase from 20% to 28%, the value of equity and asset beta mean also increases. The State Bank of Viet Nam continues to increase the effectiveness of capital providing channels for both construction and real estate companies.

Finally, this paper suggests implications for further research and policy suggestion for the Viet Nam government and relevant organizations, economists and investors from current market conditions.

Exhibit

Exhibit 1: Interest rates in banking industry during crisis (source: Viet Nam commercial banks)

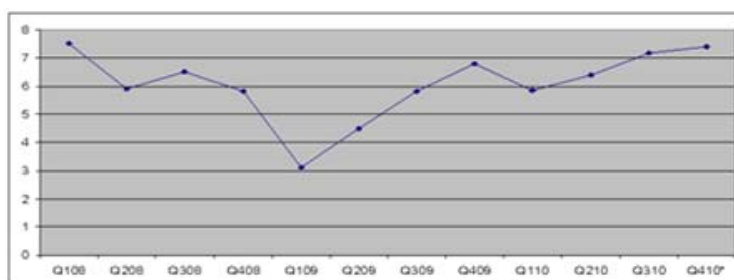
Year	Borrowing Interest rates	Deposit Rates	Note
2011	18%-22%	13%-14%	Approximately (2007: required reserves ratio at SBV is changed from 5% to 10%) (2009: special supporting interest rate is 4%)
2010	19%-20%	13%-14%	
2009	9%-12%	9%-10%	
2008	19%-21%	15%-16,5%	
2007	12%-15%	9%-11%	

Exhibit 2: Basic interest rate changes in Viet Nam (source: State Bank of Viet Nam and Viet Nam economy)

Year	Basic rate	Note
2011	9%	
2010	8%	
2009	7%	
2008	8,75%-14%	Approximately, fluctuated
2007	8,25%	
2006	8,25%	
2005	7,8%	
2004	7,5%	
2003	7,5%	
2002	7,44%	
2001	7,2%-8,7%	Approximately, fluctuated
2000	9%	

Exhibit 3: Inflation, GDP growth and macroeconomics factors (source: Viet Nam commercial banks and economic statistical bureau)

Year	Inflation	GDP	USD/VND rate
2011	18%	5,89%	20.670
2010	11,75% (Estimated at Dec 2010)	6,5% (expected)	19.495
2009	6,88%	5,2%	17.000
2008	22%	6,23%	17.700
2007	12,63%	8,44%	16.132
2006	6,6%	8,17%	
2005	8,4%		
Note	approximately		

Exhibit 4: GDP growth Việt Nam 2006-2010 (source: Bureau Statistic)**Exhibit 5:** Top 40 among top 500 SMEs with the highest growth speed in 2012 (source: Vietnamnet and Viet Nam report)

Order	Rank	Company name	CEO	Tax code	Industry
1	1	<u>CÔNG TY CP LÂM SẢN PISICO QUẢNG NAM</u>	Phan Văn Cường	4000405162	<u>Kinh doanh nông, lâm sản</u>
2	2	<u>CÔNG TY CP VÀNG BẠC ĐÁ QUỲ SJC CẦN THƠ</u>	Lê Phát Vinh	1800636290	<u>Vàng, bạc, đá quý</u>
3	3	<u>CÔNG TY CP SỢI PHÚ NAM</u>	Hoàng Văn Thám	3300491474	<u>Sản xuất sợi, dệt</u>
4	4	<u>CÔNG TY CP VÀNG BẠC ĐÁ QUỲ BẾN THÀNH</u>	Tê Trí Dũng	300847936	<u>Vàng, bạc, đá quý</u>
5	5	<u>CÔNG TY CP MAY CHIẾN THẮNG</u>	Ninh Thị Ty	100101058	<u>Ngành may</u>
6	6	<u>CÔNG TY TNHH DU LỊCH TRẦN VIỆT</u>	Nguyễn Mạnh Cường	301069809	<u>Du lịch, khách sạn</u>
7	7	<u>N.A</u>		2012701	
8	8	<u>CÔNG TY TNHH TRUYỀN THÔNG ADT</u>	Đặng Huy Thăng	100905796	<u>Sản xuất khác</u>
9	9	<u>CÔNG TY CP KẾT NỐI NHÂN TÀI</u>	Tiêu Yên Trinh	305202145	<u>Kinh doanh tổng hợp khác</u>
10	10	<u>CÔNG TY TNHH THIẾT LẬP</u>	Nguyễn Hoàng Ân	1500441413	<u>Sản xuất, kinh doanh, chế biến gạo, bột mì, ngũ cốc...</u>
11	11	<u>CÔNG TY TNHH-CHẾ BIẾN THỦY SẢN VÀ XNK TRANG KHANH</u>	Trần Tuấn Khanh	1900287501	<u>Nuôi trồng, chế biến, kinh doanh thủy sản và các sản phẩm thịt</u>
12	12	<u>CÔNG TY SẢN XUẤT THƯƠNG MẠI VÀ ĐẦU TƯ TAM MINH</u>	Lưu Tuấn Anh	4300327589	<u>Sản xuất đồ gỗ, nội thất</u>
13	13	<u>CÔNG TY TNHH THƯƠNG MẠI SẢN XUẤT HÙNG HUY</u>	Voòng A Hoa	302259111	<u>Sản xuất và gia công giấy, dếp</u>

14	14	<u>CÔNG TY TNHH THƯƠNG MẠI HOÀNG ĐẠO</u>	Hồ Hoàng Bách	301434963	Sản xuất, kinh doanh thuốc lá, nguyên liệu thuốc lá
15	15	<u>CÔNG TY TNHH THƯƠNG MẠI XÂY DỰNG ĐIỀU LONG</u>	Đặng Thị Linh Phương	302000905	Kinh doanh tổng hợp khác
16	16	<u>CÔNG TY CP XÂY DỰNG NHÀ VÀ PHÁT TRIỂN HẠ TẦNG HÀ NỘI</u>	Phạm Thanh Nam	101370536	Xây dựng nhà và các công trình kỹ thuật dân dụng; hoạt động xây dựng chuyên dụng
17	17	<u>CÔNG TY CP XĂNG DẦU THƯƠNG MẠI SÔNG TRÀ</u>	Nguyễn Anh	4300334642	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
18	18	<u>CÔNG TY CP SOI PHÚ THANH</u>	Nguyễn Văn Cường	3300471069	Sản xuất sợi, dệt
19	19	<u>CÔNG TY TNHH DU LỊCH VÀ THƯƠNG MẠI SÔNG HỒNG</u>	Lê Công Hoàng	100237411	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
20	20	<u>CÔNG TY CP DẦU THỨC VẬT BÌNH ĐỊNH</u>	Nguyễn Thị Thùy Giao	4100399995	Sản xuất thực phẩm chế biến: sữa, đường, cà phê, dầu ăn, bánh kẹo...
21	21	<u>CÔNG TY CP VẬT TƯ MỎ ĐỊA CHẤT</u>	Lê Nhật Tân	101453768	Kinh doanh tổng hợp khác
22	22	<u>CÔNG TY TNHH MTV SÀI GÒN BẾN TRE</u>	Nguyễn Ngọc Minh Hùng	1300419650	Bán lẻ, kinh doanh siêu thị
23	23	<u>CÔNG TY TNHH HẢI VIỆT</u>	Nguyễn Văn Ri	3700443193	Kinh doanh nông, lâm sản
24	24	<u>CÔNG TY TNHH MAY PHÙ ĐỔNG</u>	Dương Đức Thanh	100598947	Ngành may
25	25	<u>CÔNG TY TNHH THƯƠNG MẠI VÀ DỊCH VỤ KỸ THUẬT TESCO</u>	Trần Thanh Bình	101507773	Sản xuất, kinh doanh ô tô, phụ tùng ô tô
26	26	<u>CÔNG TY TNHH THƯƠNG MẠI PHÚC THÁI</u>	Bùi Xuân Huy	600346391	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
27	27	<u>CÔNG TY TNHH MINH ĐĂNG</u>	Nguyễn Thị Cẩm Nhung	2200258144	Nuôi trồng, chế biến, kinh doanh thủy sản và các sản phẩm thịt
28	28	<u>CÔNG TY TNHH THƯƠNG MẠI VÀ DỊCH VỤ VẠN TÀI NGỌC KHÁNH</u>	Trần Ngọc Huân	4000377194	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
29	29	<u>CÔNG TY TNHH THƯƠNG MẠI DỊCH VỤ VẠN PHÁT</u>	Cao Ngọc Anh	303332212	Kinh doanh tổng hợp khác
30	30	<u>CÔNG TY CP VẠN TÀI VÀ DỊCH VỤ PETROLIMEX NGHỆ TĨNH</u>	Võ Văn Tân	2900428497	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
31	31	<u>CÔNG TY TNHH THƯƠNG MẠI SẢN XUẤT TÂN BÌNH</u>	Trần Trí Thức	3900326063	Sản xuất đồ gỗ, nội thất
32	32	<u>CÔNG TY TNHH NGUYÊN LIỆU GIẤY DUNG QUẤT</u>	Nguyễn Nị	4300308498	Sản xuất đồ gỗ, nội thất
33	33	<u>CÔNG TY TNHH BỆNH VIỆN ĐA KHOA TỰ NHÂN AN SINH</u>	Ngô Đăng Sơn Anh	302774433	Sản xuất khác
34	34	<u>CÔNG TY TNHH IN LƯA NHẤT PHƯƠNG</u>	Huyền Thị Thanh Thủy	301441840	Sản xuất giấy, in ấn, xuất bản
35	35	<u>CÔNG TY CP DẦU KHÍ SÀI GÒN-PHÚ YÊN</u>	Trần Công Chương	4400344901	Kinh doanh xăng dầu, khí đốt, nhiên liệu và các sản phẩm liên quan
36	36	<u>CÔNG TY CP BÊ TÔNG ĐĂNG HẢI</u>	Phan Văn Khanh	400619838	Sản xuất, kinh doanh vật liệu xây dựng: xi măng, gạch xây, đá, cát...
37	37	<u>CÔNG TY CP GIẤY BÌNH ĐỊNH</u>	Võ Ngọc Thủy	4100258761	Sản xuất và gia công giấy, dếp
38	38	<u>CÔNG TY CP ĐẦU TƯ PHÁT TRIỂN THIÊN SƠN</u>	Vũ Văn Tuyên	101536301	Sản xuất, kinh doanh vật liệu xây dựng: xi măng, gạch xây, đá, cát...
39	39	<u>HTX THƯƠNG MẠI ĐÔ THÀNH</u>	Hàng Thanh Dân	302804374	Kinh doanh thực phẩm chế biến: sữa, đường, cà phê, dầu ăn, bánh kẹo.....
40	40	<u>CÔNG TY CP XÂY DỰNG TỔNG HỢP 269</u>	Trương Duy Niệm	3000244523	Xây dựng nhà và các công trình kỹ thuật dân dụng; hoạt động xây dựng chuyên dụng

Exhibit 6: Risk and financial leverage of 20 listed electric power firms on VN stock exchange period 2007-2011

Order No.	Company stock code	Equity beta	Asset beta (assume debt beta = 0)	Note	Financial leverage
1	BTP	0,840	0,357		57,5%
2	CHP	0,407	0,168	BTP as comparable	58,7%
3	DNC	-0,865	-0,270		68,8%
4	DRL	0,473	0,388	NLC as comparable	17,9%
5	DTV	0,527	0,499	NLC as comparable	5,4%
6	GHC	0,359	0,117	NBP as comparable	67,3%
7	HJS	0,699	0,200		71,3%
8	KHP	0,615	0,308		50,0%
9	NBP	0,914	0,604		33,9%
10	ND2	0,180	0,043	TBC as comparable	76,2%

11	NLC	0,550	0,510		7,2%	
12	NT2	0,639	0,137		78,6%	
13	PPC	0,811	0,232		71,3%	
14	RHC	0,361	0,200		44,7%	
15	SBA	0,177	0,062	SJD as comparable	64,8%	
16	SEB	0,427	0,194		54,5%	
17	SHP	0,485	0,245	BTP as comparable	49,4%	
18	SJD	0,420	0,221		47,4%	
19	TBC	0,612	0,568		7,3%	
20	TIC	0,351	0,343		2,2%	
Average						46,72%

Exhibit 7: Increase/decrease risk level of listed electric power firms under changing scenarios of tax rates: 25%, 28%, 20% period 2007 - 2011

Order No.	Company stock code	t = 25%		t = 28%		t = 20%	
		Equity beta	Asset beta	Increase /Decrease (equity beta)	Increase /Decrease (asset beta)	Increase /Decrease (equity beta)	Increase /Decrease (asset beta)
1	BTP	0,840	0,357	0,000	0,000	0,000	0,000
2	CHP	0,407	0,168	0,009	0,004	-0,014	-0,006
3	DNC	-0,865	-0,270	0,000	0,000	0,000	0,000
4	DRL	0,473	0,388	0,003	0,002	-0,004	-0,004
5	DTV	0,527	0,499	0,001	0,001	-0,001	-0,001
6	GHC	0,359	0,117	0,009	0,003	-0,014	-0,005
7	HJS	0,699	0,200	0,000	0,000	0,000	0,000
8	KHP	0,615	0,308	0,000	0,000	0,000	0,000
9	NBP	0,914	0,604	0,000	0,000	0,000	0,000
10	ND2	0,180	0,043	0,005	0,001	-0,008	-0,002
11	NLC	0,550	0,510	0,000	0,000	0,000	0,000
12	NT2	0,639	0,137	0,000	0,000	0,000	0,000
13	PPC	0,811	0,232	0,000	0,000	0,000	0,000
14	RHC	0,361	0,200	0,000	0,000	0,000	0,000
15	SBA	0,177	0,062	0,004	0,001	-0,007	-0,002
16	SEB	0,427	0,194	0,000	0,000	0,000	0,000
17	SHP	0,485	0,245	0,008	0,004	-0,013	-0,007
18	SJD	0,420	0,221	0,000	0,000	0,000	0,000
19	TBC	0,612	0,568	0,000	0,000	0,000	0,000
20	TIC	0,351	0,343	0,000	0,000	0,000	0,000
			Average	0,002	0,001	-0,003	-0,001

Exhibit 8: Comparing statistical results of three (3) scenarios of changing tax rate of 104 listed construction firms

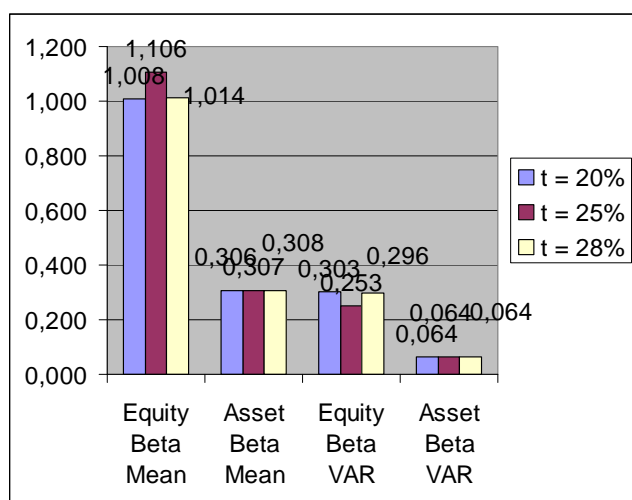
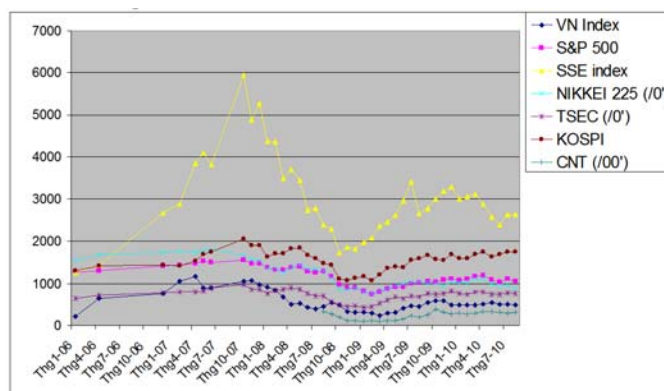


Exhibit 9: VNI Index and other stock market index during crisis 2006-2010



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